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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

1-00758

7590

08/25/2004

FENWICK & WEST LLP SILICON VALLEY CENTER **801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041** **EXAMINER**

MOORTHY, ARAVIND K

ART UNIT

MEM/SBS

PAPER NUMBER

2131

DATE MAILED: 08/25/2004

ĺ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	09/757,963	01/10/2001	John S. Flowers	HVWD-01008US0	9385

TITLE OF INVENTION: INTEROPERABILITY OF VULNERABILITY AND INTRUSION DETECTION SYSTEMS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$0 ·	\$1330	11/26/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:**

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax

annuamieta All further con	respondence including the location or directed otherwise	Patent advance oro	dere and noti	itication c	it maintenance tees v	ired). Blocks 1 through 5 s will be mailed to the current ; and/or (b) indicating a sepa	correspondence address as
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SILICON VALLEY				3	States Postal Service	with sufficient postage for fir	st class mail in an envelope
801 CALIFORNIA MOUNTAIN VIEV				t	ransmitted to the USF	with sufficient postage for fir I Stop ISSUE FEE address PTO (703) 746-4000, on the	late indicated below.
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				Ī			(Signature)
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APPLICATION NO.	FILING DATE]	FIRST NAMEI	D INVENT	OR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,963	01/10/2001		John S.	Flowers		HVWD-01008US0	9385
TITLE OF INVENTION: IN	ITEROPERABILITY OF V	ULNERABILITY	AND INTRU	JSION DI	ETECTION SYSTEM	IS MEM/SBS	
APPLN. TYPE	SMALL ENTITY	ISSUE FE	EE	PU	BLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
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MOORTHY,	ARAVIND K	2131			713-201000	.	
1. Change of correspondence	e address or indication of "Fe	ee Address" (37	2. For prin	nting on th	ne patent front page, l	ist	
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"Fee Address" indicate PTO/SB/47; Rev 03-02 of Number is required.	tion (or "Fee Address" Indicator more recent) attached. Use	ation form e of a Customer	registered 2 registere	l attorney ed patent:	or agent) and the nan attorneys or agents. If be printed.	nes of up to	
3. ASSIGNEE NAME AND	RESIDENCE DATA TO B	E PRINTED ON T	HE PATEN	T (print o	r type)		
PLEASE NOTE: Unless recordation as set forth in	an assignee is identified be 37 CFR 3.11. Completion	elow, no assignee of this form is NO	data will app Γa substitute	pear on the for filing	e patent. If an assignment.	nee is identified below, the o	locument has been filed for
(A) NAME OF ASSIGN	EE	(B) RESIDENO	CE: (CITY	and STATE OR CO	UNTRY)	
Please check the appropriate	assignee category or category	ries (will not be pr	inted on the p	patent):	☐ Individual ☐ C	Corporation or other private gr	oup entity 🚨 Government
4a. The following fee(s) are	enclosed:	4b	. Payment of	Fee(s):			
☐ Issue Fee					ount of the fee(s) is en		
Publication Fee (No s	mall entity discount permitte	ed)	-	-	card. Form PTO-203		
Advance Order - # of	Copies		The Direction Deposit Acc	ector is he count Nun	ereby authorized by onber	charge the required fee(s), or (enclose an extra or	credit any overpayment, to copy of this form).
5. Change in Entity Status	(from status indicated above	e)					
a. Applicant claims S	MALL ENTITY status. See	37 CFR 1.27.				ALL ENTITY status. See 37 C	
The Director of the USPTO NOTE: The Issue Fee and P interest as shown by the reco	is requested to apply the Issublication Fee (if required) words of the United States Pat	ue Fee and Publicate will not be accepted ent and Trademark	tion Fee (if and the from anyon Office.	ny) or to r ne other th	re-apply any previous an the applicant; a reg	ly paid issue fee to the applic gistered attorney or agent; or t	ation identified above. he assignee or other party in
Authorized Signature				_	Date		
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This collection of information an application. Confidential	on is required by 37 CFR 1.3 ity is governed by 35 U.S.C	11. The informatio	on is required	to obtain	or retain a benefit by s estimated to take 12	the public which is to file (an minutes to complete, includi	nd by the USPTO to process) ng gathering, preparing, and

submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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09/757,963	01/10/2001	John S. Flowers	HVWD-01008US0 MEM/SBS	9385
00758	7590 08/25/2004		EXAM	INER
FENWICK & W	EST LLP		MOORTHY,	ARAVIND K
SILICON VALLI			ART UNIT	PAPER NUMBER
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MOUNTAIN VIE	EW, CA 94041		2131	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 353 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 353 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



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09/757,963	(1/10/2001	John S. Flowers	HVWD-01008US0 MEM/SBS	9385
00758	7590	08/25/2004		EXAM	INER
FENWICK &			•	MOORTHY,	ARAVIND K
801 CALIFOR			•	· ART UNIT	PAPER NUMBER
MOUNTAIN V				2131	

DATE MAILED: 08/25/2004

Notice of Fee Increase on October 1, 2004

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2004, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" because an increase in fees effective on October 1, 2004 is anticipated. See Revision of Patent Fees for Fiscal Year 2005; Proposed Rule, 69 Fed. Reg. 25861, 25863, 25864 (May 10, 2004).

The current fee schedule is accessible from WEB site (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2004 (or mailed with a certificate of mailing on or after October 1, 2004), the issue fee paid should be the fee that is required at the time the fee is paid. See Manual of Patent Examining Procedure (MPEP), Section 1306 (Eighth Edition, Rev. 2, May 2004). If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See MPEP Section 1308.01.

Effective October 1, 2004, 37 CFR 1.18 is proposed to be amended by revising paragraphs (a) through (c) to read as set forth below. As stated above, the final fee may be a different amount, and applicant should check the WEB site given above when paying the fee.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

(b) Issue fee for issuing a design patent:

(c) Issue fee for issuing a plant patent:

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	
Notice of Allowability	09/757,963	FLOWERS ET AL	
	Examiner	Art Unit	
	Aravind K Moorthy	2131	

NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to 8/19/04. 2. The allowed claim(s) is/are 5-13,15-25,27-37,39 and 40. 3. The drawings filed on 10 January 2001 are accepted by the Examiner. 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) ☐ Some* c) ☐ None 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date _ (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL Attachment(s) 5. Notice of Informal Patent Application (PTO-152) 1. Notice of References Cited (PTO-892) 6. Interview Summary (PTO-413), 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Paper No./Mail Date 22 7. X Examiner's Amendment/Comment 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance 9. Other ___ of Biological Material

SUPERVISCRY PATENT EXAMINER

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Application/Control Number: 09/757,963

Art Unit: 2131

1. Claims 5-40 are pending in the application.

2. Claims 5-13, 15-25, 27-37, 39 and 40 have been allowed.

3. Claims 14, 26 and 38 have been cancelled.

EXAMINER'S AMENDMENT

DETAILED ACTION

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dorian Cartwright on August 19, 2004.

The application has been amended as follows:

Claim 8. (amended) A computer-implemented system for protecting a network, comprising:

a vulnerability detection system (VDS) for gathering information about the network to determine vulnerabilities of a host from a plurality of hosts on the network; and

an intrusion detection system (IDS), cooperative with the VDS, for examining network traffic responsive to the vulnerabilities of the host from the plurality of hosts as determined by the VDS to detect traffic indicative of malicious activity.

Claim M. (amended) A computer-implemented method for protecting a network comprising:

gathering information about the network to determine vulnerabilities of a host from a plurality of hosts on the network; and



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cooperative with the step of gathering information, examining network traffic responsive to the determined vulnerabilities of the host from the plurality of hosts to detect network traffic indicative of malicious activity.

Claim 29. (amended) A computer program product, comprising:

a computer-readable medium having computer program logic embodied therein for protecting a network, the computer logic:

gathering information about the network to determine vulnerabilities of a host from plurality of hosts on the network; and

cooperative with the step of gathering information, examining network traffic responsive to the determined vulnerabilities of the host from the plurality of hosts to detect network traffic indicative of malicious activity.

Allowable Subject Matter

5. Claims 5-13, 15-25, 27-37, 39 and 40 are allowed.

The following is an examiner's statement of reasons for allowance. As to independent claims 5, 17 and 29, prior art teaches the use a vulnerability detection system (VDS) for gathering information about the network to determine vulnerabilities of one or more hosts on a network (i.e. Todd, Sr. et al US 6,185,689 B1). Prior art also teaches an intrusion detection system (IDS) for examining network traffic responsive to the vulnerabilities of the host from the plurality of hosts as determined by the VDS to detect traffic indicative of malicious activity (i.e. Teal US 6,477,651 B1).

However, prior art does not disclose, teach or fairly suggest that the IDS operates cooperatively with the VDS.



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Todd, Sr. et al differs from the current application in that it is purely a VDS. The method assesses security vulnerabilities of one or more target hosts by a remote or local host via a server. However Todd, Sr. et al does not have an IDS for examining the network traffic responsive to the vulnerabilities of the host determined by the VDS. Teal differs from the current application in that it is purely an IDS. Vulnerabilities are determined by analyzing network traffic. Signatures associated with each network vulnerability are determined by investigating specific patterns on network data associated with an attack on the vulnerability.

The dependant claims, being further limiting to the independent claims, definite and enabled by the specification are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Art Unit: 2131

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K Moorthy whose telephone number is 703-305-1373. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy August 19, 2004 AVAZ SHEIKH
SUPERVISCRY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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